

GEORGE HAYWARD'S JOURNEY TO THE CENTRAL ASIA: THE PERIPHERY OF THE BRITISH IMPERIALIST POLITICS*

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Abstract: Geography formed an important part of the scientific knowledge which Britain needed during the time when its interest in Central Asia was starting to increase. The technical innovations developed accordingly were implemented in the field, and cartography activities intensified. With the alternation of the domestic political dynamics and economic policies, George Hayward's journey to Eastern Turkestan in 1868 with the intent of a geographical expedition has a special importance in this context. This adventurer employed on a salary by the Royal Geographical Society is their only move to capitalize on the relation between geography and politics. This journey is the result of a decision-making mechanism merging the British administrative, military and academic authorities under the same political direction. Consequently, Hayward's geographical expedition served their financial and political.

Keywords: Royal Geographical Society, George Hayward, Eastern Turkestan, Yarkand, Kashgar, Kashgar Khanate.

İngiliz Emperyalist Politikasının Periferisi: Orta Asya'ya George Hayward'ın Seyahati

Öz: İngiltere'nin Orta Asya'ya olan ilgisinin artmaya başladığı dönemde ihtiyaç duyduğu bilimsel bilgi birikiminin önemli bir ayağını coğrafya oluşturmuştur. Bu doğrultuda geliştirilen teknik yenilikler, sahada uygulanmaya başlanmış ve haritalama faaliyetleri yoğunlaşmıştır. İç siyasi dinamiklerin ve ekonomik politikaların değişmesiyle 1868'de Doğu Türkistan'a coğrafi keşifler için gönderilen George Hayward'ın yolculuğu bu çerçevede özel bir öneme sahiptir. Kraliyet Coğrafya Topluluğu'nun, maaş karşılığı görevlendirdiği bu maceraperest, topluluğun siyaset-coğrafya ilişkisinin sahada karşılığını almak için giriştiği tek hamledir. Bu hamle, aynı politik doğrultuda birleşen İngiliz idari, askeri ve akademik karar alma mekanizmalarının planıdır. Bu doğrultuda Hayward, gerçekleştirdiği coğrafi keşif gezisiyle iktisadi ve siyasi çıkarılara da hizmet etmiştir.

Anahtar kelimeler: Kraliyet Coğrafya Topluluğu, George Hayward, Doğu Türkistan, Yarkent, Kaşgar, Kaşgar Hanlığı.

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Introduction

Considering Britain's commercial and political interests, Central Asia has been a lesser-known geography for a long time in comparison to regions such as America, Australia and India. It is possible to assert that given India's economic significance, the information she had Central Asia and its surrounding areas is insufficient. Notwithstanding the strategic importance of Iran and Afghanistan, Central Asia an immense region where various nations and nomads cohabited, with high mountain ranges blocking transportation was in the 19th century a *terra incognita*.

According to British people travelling mostly by sea, "Central Asia" or "High Asia" was perceived as monotonous, although people living there were culturally diverse. As understood from the reports of the voyagers, there was no attempt to approach the region and identify the locals apart from geographical concerns. Moreover, the term "Tartary" continued to be used throughout the 19th century for Central Asia and all the regions where people who speak Altai lived (Watson, 2007, p. 99).

While expeditions to the region of Central Asia were a source of inconvenience, due to the wars waged for the domination over Afghanistan and additionally because of the insecurity of the mountain ranges and passes, journeys to Turkestan were of vital importance in the first quarter of the 19th century. When compared to the profit gained from the trade with India, it would not be a mistake to think that the challenging geography of Central Asia is perceived as a periphery in this equation, because of the expeditions that began in this period. The scientific infrastructure that would support and actualize the journeys would be prepared with the cartographical and topographical data of the geographical studies conducted in India institutionalizing and becoming one of the supportive pillars of the imperialist moves. These institutions are the Survey of India and the Great Trigonometrical Survey which made progress with the financial contributions and partnership of the East India Company. These studies that crossed over to the northern parts of India had been sustained in an effort to show the region in a map plane and to gain information regarding geography, landform diversity and trade routes in reference to military and political concerns towards northern neighbors (Withers, 2013, pp. 4-6; Purdon, 1861, pp. 14-17; Roy, 1986, pp. 23-27).

Therefore, the journeys to Central Asia and Turkestan circa 19th century were made with the assignment of soldiers and survey engineers belonging to the East India Company. Although these journeys did not proceed regularly and systematically, unknown challenging passes and trade routes started to become a center of attention. It is possible to think that the East Indian Company and these institutions provided an increased attention and an economical evaluation of

Central Asia even though their role in British foreign policy-making process was much more determinant (Waller, 2004, pp. 1-20). One of the institutions that would actualize it was an academically based non-governmental organization.

One of the institutions which could produce the “data” serving imperialist expansion in the area and where geography and cartographical activities were conducted, was The Royal Geographical Society. This society which was established in London took on tasks such as developing geography and its methods, providing financial opportunities to do field studies and supporting travelers. One of the subjects the society mainly refers to in their media outlets and meetings that are presented to the public on a regular basis is the geographical journeys made to the northern parts of India and to Asia (Markham, 1881, pp. 19-32). In addition to their importance of understanding the region’s equivalence as a political notion for Britain, the studies for geographical identification and cartography relating to Central Asia and Eastern Turkestan can be evaluated as obvious examples of diplomacy, cartography and geography relations in 1860s.

In the administration of presidents such as Roderick Murchison and Sir Henry Rawlinson who are also among the founders, lack of geographical information and cartographical activities regarding the unknown territories of Central Asia and Eastern Turkestan has frequently come to the fore. As for the community’s connection with the politics, it can also be directly related to the political preferences of others. The vice president and the president of the next two periods, Sir Henry Rawlinson was one of the representatives of the Royal Geographical Society of the Parliamentary side of the Forward Policy adopted so as to cease Russia’s expansion into Asia, one of the discussion points of the foreign policy particularly at the end of the 19th century thought that Britain’s status in India was under the threat of the expansionist Russian Empire (Goldsmid, 1895, pp. 490-496). Rawlinson, arguing for the significance of the conflict with Russia focused on cartography and of the geographical expeditions to Turkestan. He dwelled upon the possibilities that in 1865, China’s losing control over Eastern Turkestan would allow for Russia’s expansion; that Russia would control potential trade and the underground sources of the region; and that the Russians could threaten Kashmir (Rawlinson, 1866a, pp. 135-146). Under these circumstances, advancing and sustaining the Geographical Society’s expeditions and journeys gained momentum. Lord Mayo, being appointed as the Viceroy of India in 1869, unlike his predecessor Sir John Lawrence (1864-1869), agreed with Rawlinson who was consulting him on the subject of organizing geographical expeditions to Central Asia and obtaining trade routes, economic potentials and political intelligence (Duthie, 1981, pp. 39-43).

Thus, as Britain’s liberal commercial policy affected the exploring activities of new trade routes between India and Turkestan, George W. Hayward was sent to Eastern Turkestan with Rawlinson’s initiative as the first and the last explorer

sent by the Society. In 1868, Hayward was officially appointed and provided with the necessary equipment. Hayward's duty was to explore the passes between Ladakh and Kashgar, to study the Pamir Steppes, to look for or to confirm the source of the River Oxus and Yarkand Rivers and to scout along these valleys. Hayward started his journey in these conditions, in 26 August 1868, surveyed new routes and rivers and also gave information about the Turkic people and others living in the region. The appointment of George Hayward as a civil explorer, in 1868 happened in a time when previous expeditions nearly came to a stopping point. While the threat of Eastern Turkestan for British explorers put off such an expedition, Hayward's journey extending to Kashgar was accepted to be a crucial initiative on account of British public opinion in India and London. Surveying challenging and risky paths, Hayward's efforts of searching for new routes, his information given about the passes and his notes on Central Asia were planned to serve the policies which are made on a geographical basis. It is possible to evaluate Hayward's appointment by the Geographical Society that was institutionalized after 1830s, within the sustained knowledge of modern geography based on the observations, experimental data, measurements and methods affected by technical and economic developments and also defined as "scientific imperialism" (MacKenzie, 1990, pp. 2-8).

This study is about the discovery of the territories through which British expansionism could extend its trade area and George Hayward's journey will be scrutinized in the context of cartography and imperialism. Accordingly, the use of "data" in contemporary conditions will be analyzed vis-à-vis the conflicts of interests between Russia and Britain with reference to the significance of geography. The journey notes, letters and observations used in the study were compiled and released to the public by the media outlet of the Society. The observations of Bernard Shaw who was present in Yarkand at the same period also gives information about Hayward's Eastern Turkestan journey. Finally, we will assess how the society evaluated Hayward's geographical and topographical analyses, information on Turkic people in the region, the overall situation of Kashgar Khanate, trade routes and new/alternative route suggestions, before the journey made to this region was consequently officially acknowledged.

George Hayward arrived in Kashgar in 1868. Hayward managed to meet with Yakup Beg after arrested in a house. After he turned to Ladakh, India in 1869, he was awarded The Royal Geographical Society's Gold Medal for his geographical measurements about The Kun Lun, Karakoram Mountains and the source of Yarkand. In 1869, he planned a second travel through Himalaya, Hindu Kush to explore the source of Oxus but he had to back to India because of bad winter conditions. In June 1870, he tried again to travel to explore the source of the river Oxus. He moved to Kashmir territory and reached Gilgit and Yasin. In 18 July 1870, Hayward reached to town of Darkot where he was murdered. His body and

last papers, notes were found by a soldier of the Maharaja of Kashmir (Timmis, 1998, pp. 164-170). The last and second travel and his notes are not the subject of this work. In this paper, the notes and letters of George Hayward about his journey to Central Asia will be examined.

The primary source concerning the subject is the related volumes of "The Journal of the Royal Geographical Society of London, 1868, 1869, 1870" which includes the detailed reports and letters of the journey and the other journal of the Society, the "Proceedings of the Royal Geographical Society of London, 1868, 1869, 1870". Apart from these, there is an article written by Charles Timmis titled "George Hayward: His Central Asian Explorations, His Murder, His Legacy" and a narrative-based history book written by Tim Hannigan titled "Murder in the Hindu Kush: George Hayward and The Great Game" (Hannigan, 2011).

1. The Journey of George Hayward

His full name being George Jonas Whitaker Hayward was born in Yorkshire, England on the 9th of June, 1839. At first, he worked in the textile trading, and after that, when he enlisted in the army, he served under the Earl of Cardigan to fight alongside one of the regiments in charge of suppressing the Sepoy Mutiny which broke out in India.

Afterwards, he served in Khyber in a region where an uprising was thought to occur. Besides teaching him how to survive, his military career allowed him to specialize in draughtsmanship and watercolor painting. These are undoubtedly vital skills that an explorer must have. Climbing and sharpshooting which he experienced in the northwestern parts of India are also among his specialized skill set. He even became familiar with the region when he went hunting in Kashmir, Baltistan and Chitral mountains. In the meantime, he practiced Urdu and Persian. However, the reforms and ever-increasing professionalism in the army did not suit his adventurous soul. Therefore, he sold his commission, resigned as lieutenant and left the British Army in 1865. When he returned to England, it is thought that he remained under the influence of Alexander Gardiner who was a family friend and a veteran from Kashmir. Knowing the Pamir and Hindu Kush Mountains, Gardiner shared his personal notes with him and encouraged him for such a journey. The details of the process of Hayward's appointment by the Royal Geographical Society is not clear enough, however, his desire and plan to go to Chitral and Dardistan were alternatively turned into an expedition of Yarkand, Kashgar and then the Pamir Mountains through Chang Chenmo Pass (Timmis, 1998, pp. 163-164).

Handing over the presidency of the Society to Rawlinson in 1869, a year after the journey started, Murchison first announced this at the annual general meeting in 1868, saying that their officer is preparing to be sent to Central Asia. In response to the criticism regarding the lack of interest and projects concerning Asia,

Rawlinson described him as being very aspirant to be appointed. Although the process is unclear, it is more than probable that Hayward, with his curiosity of the expedition, directly contacted Rawlinson and the Society with the intention of being appointed. During a period when Eastern Turkestan and Central Asia in general terms are discussed considerably, Murchison revealed the nature of the journey by saying that “our agent” is acting only for geographical expeditions. George Hayward started his journey as an explorer who was entrusted with fulfilling the necessities of geography with the awareness of the perils of the region, the delicate relation with Russia, the assassinations of the British explorers before him and that his duty required great patience and resolve (Stafford, 1989, pp. 120-127).

1.1 The Beginning of the Journey

While Hayward was supposed to proceed within the regular route which follows the Indus River, he started his journey in Central India, thinking he would gain some time (August, 1868). Evaluating the risks of the journey, he wanted to head towards Badakhshan from Peshawar, however, when the Governor of Punjab stated that the region is dangerous for the British, he gave up on that idea and reported that he intended to survey Badakhshan, when he crossed the Pamir Steppes to return after he arrived at Yarkand. Moreover, his emphasis on the necessity of a route from Jalalabad to Turkestan via Chitral and Badakhshan, even if it is sketchy, shows that he was in search of the shortest and the most direct route. He arrived at Leh, the capital of Ladakh and from there to Yarkand in a month or so. The challenge and the most important problem of the journey was to open the market of Yarkand to trade with India and ensure the security of British products such as tea or wool (Hayward, 1868, pp. 9-10).

1.2. The Exploration of the Sources of the Yarkand River

A subject that is discussed over the geography of Central Asia is the determination of the source of the Yarkand River. His survey on this subject is a crucial stage in the scope of his duty entrusted to him. As Hayward and the British authorities knew, there were three routes to Yarkand. The first is the 530-mile-long Zamistanee, or the winter route, which crosses the Digur La Pass and ascends the Valley of Shayok River to the Karakoram Range. The second one connects to the Karawal Pass, crossing the Kardong Pass and ascending the Nubra Valley, and then to the Zamistanee route, crossing the difficult Sasser Pass; crossing the Karakoram Range, both routes reach Aktagh from which they diverged, the Zamistanee route reaches Kugiar, Karghalik and Yarkand via Yangi Pass heading down the Yarkand River from Aktagh. As for the 480-mile-long Tabistanee route, it reaches Shadula and the valley of Karakash River crossing Aktagh via the Sooget Pass, arrives at Karghalik via the Sanju Pass and then goes into Yarkand after 58 miles. By entering the valley of Karakash River, Hayward

chose the third route which joins the Tabistane route in Shadula region, following the Chang Lang Pass via the Chang Chenmo route and crossing a series of high plains of the Kunlun. The Chang Chenmo route is 316 miles away from Leh to Shadula and 191 miles away from here to Yarkand. Afterwards, this route had been worked on under the leadership of Forsyth relying on the information given by Hayward. Furthermore, this route had been declared a free trade route between Leh and Yarkand and was worked on to become a main trade route. That the road was located at high altitudes and even though it was suitable for caravans lack of pasture made the route unpreferable and difficult for caravans. Hayward stated that the main purpose of his expedition was to remove political and geographical difficulties and obstacles while finding and securing an easy pass to connect it with the old Karakoram route, avoiding Kashmir and Ladakh. He also reported that a shorter and an easier trade route needed to be opened directly connecting the northwestern provinces of India to Yarkand. He bought a laden mule, yak and a Yarkand horse and provided himself with the company of some Ladakh villagers. When he set off for the valley of the Chang Lang Pass, he wrote his last letters to Britain for the time being "at a place where the connection between the wilderness of Central Asia and civilization". He mentioned that Chang Lang Pass known as Chang Chenmo Pass, took the name of the valley and that the place was the easiest of all passes in the Karakoram and Hindu Kush regions. Being suitable for pack horses and camels, this route had the potential to be rendered usable even for the carriages as it was convenient to be improved. Additionally, it had a great geographical importance for gaining access into the basin between Indus and Turkestan Rivers in the direction of Karakoram's main path and for drawing the northern confines of the dominion zone in Kashmir. Hayward went along the pass but he faced the lack of pasture for the animals. Nevertheless, moving on the path, he arrived at the Lingzi Thung Plains with the desire of reaching the main source of the Yarkand River and he descended to the Kizil Pass, arriving at the frozen upper waters of the Karakash River. He thought that this spot was one of the main branches of the Yarkand River but then he realized it was the Karakash River. He ascertained that the road from the Chang Chenmo to the Kizil Pass was relatively more preferable than the Karakash Valley. Following the Kizil Pass, he asserted that this previously unexplored land called Kizil Jilga was suitable for pack horses and camels and added to his notes that "he probably passed the would-be main trade route between India and Eastern Turkestan in the forthcoming years" (Hayward, 1869, pp. 41-45). While the yaks had anatomic difficulties on descending the slopes and their occasional foot fractures slowed down movement, the Turkestan horses did not damage their carried goods over river crossing, he observed, to add that the horses were more suitable for these kinds of routes as they could preserve their energy for a long time.

Following the Valley of Karakash River to its upper parts, he intensified his surveys on whether the river is the main source of the Yarkand River or not to finally confirm that it was the upper waters of the Karakash River. At this point, he probably made attempts to check alternative routes, because while it was possible to go down the river, try a route westward to the Yarkand River from Karatagh and connect to the usual route from the Karakoram Pass in Aktagh, he decided to explore and survey the Karakash route towards Shadula. He asserted that the Karatagh Pass was relatively more suitable and stated that despite its notoriety it was not more challenging than the Karakoram Pass. Therefore, he chose the Karakash route and decided to follow the lower side of the river to Shadula. Making sure that he followed the Karakash River was probably the first geographical deduction of the journey. Also following the valley of the river, he observed its ascent and proved that it was part of the main chain of the Karakoram, not the Kunlun. According to this deduction, Hayward revealed that William Johnson made a mistake on his journey in 1865, because he could not see the point of junction when he crossed this valley on his way to Hotan. According to his estimation, Johnson went into the upper valley of the Karakash River but never so far down the river as to be able to see its upper source from any distance. Had he done so, he could have shown that the Karakash River and the one which passed Aktagh could not be the same, on account of the difference in elevations as a result of observations for altitudes (Rawlinson, 1866b, pp. 7-10).

Hayward and his group reached Shadula, a trade site on Karakash River. They found this place turned into a fort and occupied by the Governor of Yarkand, Yaqub Beg. There he met up with the tea merchant Bernard Shaw who had arrived with many goods and a large tea caravan, directly via Chang Chenmo from Kangra that was under British administration of Britain, and was heading towards Yarkand. Hayward would not continue to Yarkand, like Shaw, by going eastward to reach the valley of the Yarkand River and then go to Yarkand via Shadula. Actually, even if it seemed like a move made towards his primary purpose, they had no other option for they were not allowed to enter the city. They were kept separate by a guard and were not allowed to communicate with each other. When they tried to converse with Panja-bashi who was in control of Shadula by means of an interpreter, they understood that the attitude towards them was because they were distrusted and there was the threat of Russia in the northern border (Shaw, 1871, pp. 83-85).

Hayward believed that the Karakash River was fed by the Yarkand River which was one of the major rivers of Eastern Turkestan and the Karakoram Mountains, and then he started waiting to obtain permission in order to descend to the source of the Yarkand River. While waiting, he was getting worried about the condition of the roads worsening. Moreover, it was clear that he would not conduct any surveys with the company of the Turkic guards, even if he was allowed to move

around. He solved this problem by leaving their side on the pretext of going hunting. Thus, he continued his movement away from the guards and succeeded climbing towards the Kirghiz Pass (Hayward, 1869, pp. 46-47).

The Kirghiz Pass, 17093 meters above sea level, winding towards the peak and Hayward's survey of the eastern parts of the Kunlun provided a large field of view regarding the determination of some hills and basins on it¹. The Karakoram and Muztagh Mountains, with the range of the Western Kunlun, were in sight to the westward, and among the interminable mass of precipitous ridges, deep defiles and basins. Therefore, it was difficult to distinguish the exact course of the Yarkand River. Crossing the Kirghiz Pass and following the route which was relatively losing altitude, he got down below the junction of the depression in the Aktagh Range with the main chain of the Kunlun and reached the basin of the Yarkand River. Walking nonstop, the company started to get close to the valley of the Yarkand River. They continued down the narrow ravine to its junction with the valley of the Yarkand River which was at a distance of 33 miles west of Shadula. It was recorded that an observation showed the latitude to be 36°22'7" N. The river there came down from the winding spurs of the Karakoram and Aktagh ranges and varied from 300 to 500 meters in width. He did not neglect gaining some useful information and intelligence about the security and usefulness of the routes while proceeding on the old routes that connected to the paths he crossed before. These type of knowledge that helped him to accomplish his mission and contributed to geography. For they were of vital importance to his successors². Afterwards, he made a record of a campsite and the path to the Yangi Pass which he considered to be the most suitable route from Karakoram to Eastern Turkestan for pack horses and camels. He also recorded Tiznaf River that joins to the Yarkand River and was one of its principal tributaries and successfully reached the Muztagh Pass. From there, he could observe how the Yarkand River bore to the south. In his journey, he determined the altitudes according to the boiling point of water, and sometimes used equipment such as sextants.

¹ One of the geographical determinations of Hayward's journey was the observation of some of the hills of the East Kunlun range and the mapping of the hills of the Lingzi Thung plains.

² While he mentioned that the valley through which he went joined the Karakoram Pass and then the Zamistanee route, Hayward obtained information about the threat of the plunderers in the region on the caravans plying between Leh and Yarkand and their characteristics. From what he was told, these outlaws were taking advantage of the turmoil in Turkestan and they were robbers coming from Hunza-Nagar District. This also shows how unsettled these lands were for trade between India, China and Afghanistan, and consequently Kashmir, and that how insecure they were for trading. However, Muhammad Yaqub Beg completely closed off this route which was geographically quite suitable, binding it to his own permission.

He confirmed that in the vicinity of the Yarkand Basin the highest hill in south was 12,130 meters above sea level and the valley was 2000 meters in width. He wrote that on the 8th of December, he reached the source of the Yarkand River which was an elevated plateau, or basin, surrounded by high snowy peaks. He mentioned that the center of this plateau formed a depression of about 22 miles long, where the snow melted, forming a lake and that was frozen. He added that the outlet was to the west, in which direction the stream, issuing from the basin, run through a ravine for 2 miles to the head of the open valley, where, joined by two other streams from the high range lying west, they formed the head-waters of the Yarkand River, commencing from here and flowing with a course of 1300 miles into Central Asia. While recording the land around the head of the Yarkand River, Hayward started preparing to return to Kufelong. On his way back, he recovered the goods and supplies of a caravan, going to Yarkand from Ladakh by way of the Zamistanee route, lost during the travel to the Yarkand River.

Apart from determining the real source of the river, the result of the 20-day-travel of Yarkand was crucial as it emphasized the difference between the similarities of the Karakoram and Kunlun ranges and recorded geographical features. He also pointed out the mistake in the British maps showing that the Karakoram and Kunlun were the same mountain ranges. According to Hayward's notes, the distinct water basins, the barriers between river basins and the Yarkand and Karakash Rivers were between two mountain chains. On the other hand, he pointed out that the Tiznaf River was rising towards the Karakoram Pass and was streaming from the junction of the Kunlun and the Yarkand River. He clearly displayed that the information that the source of this stream was at the head of the Sarikol territory, near the source of the River Oxus identified by Wood was wrong (Wood, 1841, pp. 352-357). Moreover, the Tiznaf River was not a branch of the Yarkand River but rising in the northern slope of the Kunlun which was in the east of the location where the Yangi Pass crossed this range. The main body of the Yarkand River formed lying west of the Karakoram Pass and from here followed passes, peaks and valleys until it reappeared in the Eastern Turkestan plains. According to Hayward, "it would be more appropriate to use a definitive geographical name for the mountain ranges distinguishing the Indus basin from Turkestan rivers". The whole mountain range was called "Buzul Dağ (The Glacier Mountain)" in Turkish by the residents of Eastern Turkestan, and only the Karakoram Pass was vaguely called the Karakoram, but he considered it appropriate to call thus as the Karakoram, the mountain system that included the mountain range from Pusht-i Khar to Chang Chenmo.

2. Observations on Yarkand

After these explorations, he reached Yarkand on December, 1868. One of the first British to enter Yarkand apart from Hayward, was Shaw. However, he did not mention him much or give detailed information about their relationship. The only

mentions were that Shaw was ahead of him since Shadula, and that he was the first British to have the distinct honor of reaching Yarkand, arriving to the city 10 days earlier while he was exploring the Yarkand River. There was a fort lying at the distance of about 500 yards to the west of the city with which it was connected by a bazaar. The fort had three main gates, the eastern gate faced the city, the southern one faced Hotan, and there was the Kashgar gate which was 80 yards away from the southwest corner facing the west. The gates were surrounded by high ramparts and these were connected to the main roads around the city. Hayward's group were accompanied by 40 armed forces and they were hosted decently. Hayward called the Shaghawal, the Governor of Yarkand, Muhammad Azim Toonas, as "Wuzeer (Vizier)" and reported him as being "a reasonable man". The Shaghawal hosted him and Bernard Shaw in Yarkand, entertained them and even kept them up for a while (Shaw, 1870, pp. 177-178). He entertained Hayward in his palace. The massiveness of the palace compared with the region, his servants, and the silk garments of the governor all left a lasting impression. Hayward stayed nearly two months in Yarkand in the garden of the house assigned to himself, not allowed to wander outside. The food, dastarkhwans, servants and horses given to him every day must have made him feel quite good that he could not realize until January 1st that he was not allowed to move around and go outside the city walls without a company. He thought that Yaqub Beg in Kashgar ordered that he was taken good care of. Robert Shaw who was in Yarkand at the same time as himself was also under surveillance. However, they were not allowed to see and talk with each other in the five months they were in Yarkand and Kashgar. Entering Yarkand with large amounts of goods in order to trade, Shaw observed that he was not allowed to trade due to the fact that he was under strict surveillance even if he mentioned that they were less suspicious of him. He was always worried about their presence there being falsely described and interpreted while "a lot of agents were patrolling" in Yarkand. He said that it was impossible to explain that a lone explorer, away from political, commercial and religious purposes, was there with the aim of exploration without a perception unrelated to the prejudice of being an agent. Even so, he managed to obtain some information from an Afghan by the name of Kureem Khan who came for trading purposes and could not return to his country. He received daily news about Kashgar and Yarkand through his servants and they were very useful (Hayward, 1869, pp. 56-60). According to the news, the arrival of Hayward and his group from Ladakh and their entrance to Eastern Turkestan were perceived as an important event, this information was transmitted to Yaqub Beg, and they were ordered to be kept under strict surveillance, hosted well and taken care of. Apart from this, it was concerning that the information regarding the khanate's situation would be leaked outside. Besides, Kureem Khan gave interesting information about Badakhshan and Chitral. Kureem Khan who crossed these routes on his own mentioned that instead of the Ladakh route, there was a shorter route to India

via Chitral Valley; however, they eventually reached the conclusion that the route was not secure for a British. Hayward planned that when he got in touch with Yaqub Khan, he would request his permission and support for the journey to the Pamir Steppes from Kashgar. He planned to enter Pamir via Hunza and Nagar or the Gilgit route while he would return from the way he came, if he could not get permission. His measurements for Yarkand were roughly the same as Mumammad Hameed's, who was working under Montgomerie; thus, the measurements for Yarkand were verified (Hayward, 1869, p. 60).

3. Kashgar and Meeting with Yaqub Khan

During his journey from Yarkand to Kashgar, Hayward kept records of rivers, plains, villages along the route and the people living in those places. His notes included information about the route containing villages and cities rather than describing Kashgar city. Hayward assessed Kashgar like Yarkand with regard to its defense systems and ramparts. Going beyond geographical concerns, the durability of ramparts and bastions and the evaluation of Russian and Chinese forces were of military interest. There is no detailed description about the interior of the city, implying that Hayward was not allowed to do surveys. However, the features of the settlements and the routes, he used between Yarkand and Kashgar are important.

He had many opportunities to have a conversation with the Governor of Yarkand before he left on the 24th of February. Muhammad Azeem Beg ordered some of his guards to accompany Hayward and provided his security. These conversations are full of expressions exalting Yaqub Beg regarding his courage and mightiness. His first impression when he exited Yarkand was the ruined image of skirmishes and battles in the region, he frequently emphasized in his account. The route fertilized by the tributaries of the Yarkand River also provided a habitat for numerous wild animals. From there, he crossed the Khanarik River and noted that the river was formed by the stream flowing through the Kizil Yart range which was an extension of the Pamir range. Crossing the Khanarik River, they reached the town of Tasgam and observed the stream flowing from the Kashgar and Khanarik Rivers. Carrying on the path, they reached the eastern ramparts surrounding Kashgar and saw the north gate of the city at the northeastern side of the ramparts. The entrance to Kashgar city was in front of them (Hayward, 1869, p. 65).

The first observation about Kashgar was the city walls and their security. The ramparts were 600 yards high and the northern and southern sides were relatively longer. The walls were 40 feet long, 25 feet deep, and approximately 40 feet wide, being wider and higher than the ramparts of Yarkand. The main entrance was in the center of the north walls. There were defense systems built in the east and west corners of the north and south walls. However, there were no defense

systems for nearly 250 yards between the east gate and the northeast corner and Hayward indicated that this was the weak spot of the ramparts. When he entered from the north gate, the main road extended along the ramparts, gravitating towards the center in the direction of north-south and parting to the streets and heading towards houses. There was a huge mosque in the southeastern corner and a Chinese Pagoda near the west walls. However, this spot had been turned into a defense point. There were chiefs' palaces near the households. According to Hayward, the defense systems of the ramparts and the moat surrounding them were made so sturdy that this fort was able to be defended for 18 months in 1864 and 1865. In fact, even if a European army was solely comprised of Asian soldiers, they would have had great difficulty taking the fort with siege. The city was surrounded by high ramparts made of reinforced earth. There were 17 defense systems in the southern side and 5 entrances. The city quickly developed and grew after the Chinese were banished. It accommodated 28 thousand households and a population of 60 to 70 thousand. According to Hayward, although it was lesser known by the European politicians, it was in a key location for the north of Eastern Turkestan. Its gradually increasing power and making it accepted would play a vital role in the politics of Asia. It is positioned in place which was special and central, militarily and politically.

He reached Kashgar and observed a caravanserai that was standing between the walls and the old city. Next morning, he went to the palace of Atalik Ghazi Muhammad Yaqub Beg, the ruler of Eastern Turkestan, in order to have a meeting with him.

The Yusawal bashee who escorted me retiring, I advanced alone, bowed, and then, shaking hands, sat down opposite to the Atalik. He was dressed very plainly in a fur-lined silk choga, with snow-white turban, and in the total absence of any ornaments or decorations presented a striking contrast to the bedecked and bejewelled rajas of Hindustan. I was at once favourably impressed by his appearance, which did not belie the deeds of a man who in two years has won a kingdom twice the size of Great Britain. He is about forty five years of age, in stature short and robust, with the strongly-marked features peculiar to the Ozbegs of Andijan. His broad, massive, and deeply-seamed forehead, together with the keen and acute eye of the Asiatic, mark the intelligence and sagacity of the ruler; while the closely-knit brows and firm mouth, with its somewhat thick, sensuous lips, stamp him as a man of indomitable will, who has fought with unflinching courage, and, never sparing his own person, has, in the hour of success, been alike stern and pitiless in his hatred to his foes. Although an adept in dissimulation and deceit, the prevailing expression of his face was one of concern and anxiety, as if oppressed with constant care in maintaining the high position to which he has attained. His manner was, however, most courteous, and even jovial, at times. If report speaks true, his bed can hardly be one of roses, as it is said that the danger from some secret assassin's hand is so great that he

never remains for more than one hour in the same apartment during the night. The few presents which I had brought for the Atalik were delivered and a man was summoned to interpret, who remained standing at some short distance, on the ground below the verandah. The conversation was at first the usual Oriental etiquette; and shortly afterwards the Atalik Ghazee expressed a hope that the English would in future visit his country, as hitherto they had been prevented from entering Central Asia by the Bokhara tragedy, when Colonel Stoddart and Captain Conolly were murdered by the Ameer of Bokhara in 1842. He then proceeded to say that another European-meaning Schlagintweit- had also been killed in this very place, Washgar, by a robber named Nullee Khan, who, relying on his spiritual influence as one of the seven Khojas, overran the northern provinces of Eastern Turkestan with a wild rabble of unscrupulous followers in 1857 and 1858 executing and murdering the most innocent people for the mere sake of shedding blood. The Atalik, however, never mentioned that he had himself involuntarily avenged the murder of Schlagintweit; and this he might have averred, for he cut Nullee Khan's throat two years ago. After a short conversation, I took leave, and was conducted to the house of the Yusawal bashee, in which quarters were assigned to me during my stay in Kashgar (Hayward, 1869, pp. 68-69).

During his time in Kashgar, he was kept under strict surveillance as he was in Yarkand and was not allowed to move around. The one who accompanied him kept him under strict surveillance in big towns but allowed him to move a little more freely in smaller towns. He stayed in Kashgar for a month from the 5th of March to the 13th of April and during this time he conducted surveys whenever possible. The position obtained for the fort was in latitude 39° 19' 37" north, and by its distance from Yarkand in longitude 76° 20' east; the elevation of 4165 feet above sea-level was determined from the observation of the boiling point of water. The position of the city of Kashgar, lying directly north from the fort across the river, was estimated to be in latitude 39° 23' 9" north, and in longitude 76° 10' east. He left Kashgar, on the return journey, as the sun rose on the morning of the 13th of April in a clear day (Hayward, 1869, p. 69).

According to Hayward, when the map is glanced over, the direct route from the northern provinces of India to Yarkand must be to climb over the Karakoram and Kunlun ranges after reaching Chang Chenmo and to step into the high plains of Aktagh; and the main route from Aktagh to Eastern Turkestan must be to follow the Yarkand River, proceeding through the valley while descending and to climb over the Kunlun range, crossing the Yangi Pass. In fact, the shortest route via Aktagh is to cross the Chang Chenmo Valley. However, Hayward tried another utterly different route on the return. Crossing the Chang Lang Pass which bisects the Karakoram Range, he reached the western edges of the Lingzi Thung Plains, marched up the upper valleys of the Karakash River, and then crossing the Karatagh Pass, reached Aktagh. According to Hayward, this route was the

shortest one for the caravans that departed from the northern lands of India without stopping by Kashmir and Ladakh. This route which he tried out personally was extremely suitable and perfect for pack horses and camels. This route also had natural advantages which made it possible to travel for 240 miles from the Chang Chenmo to the valley of the Yarkand River (Hayward, 1869, p. 71). This route could easily be used for carriages and convoys. Besides, plenty of grass and shrubs to burn in the Karakash Valley eliminated the challenges and disadvantages of the sections of the Karakoram Range and the Sasser, Kardong, and Karakoram Passes over the Ladakh side. According to Hayward, the activation of this route would enable it to be used militarily intensively besides being an easy route. To him, any improvements on this route were ignored while the Central Asia problem was being discussed. Moreover, although he did not mention its source, in a recent study there was a notion that this route was not suitable enough for an army to cross. It would be a mistake to think that any contact, strife and battle with the enemy forces who could climb over mountains was inevitable, that there must always be a preparation for a conflict and that this venture was unsuitable. According to Hayward, the invaders' attempt to withdraw from these mountains and that they would have trouble doing was equally true, however, "a bunch of savage Tatars cannot be compared with disciplined European forces acquainted with warcraft and equipped with modern materiel". There would not be any major obstacles for an army trying to get to India from Eastern Turkestan between mountains until they marched down to deeper depressions of lower Himalayas. The section of the route between the peak of the Karakoram range and the Turkestan plains was quite practical and like in all possibilities in a military manner. This was the place where the Russian Empire and the British Raj (the Indian Empire) would interact with each other and where the borders would encounter. This occasion required a special treatment, Hayward noted. According to him, the improvement of this route, turning it into a practical one and controlling it militarily revealed that preventive precautions could be taken against all possible encounters with Russia (Hayward, 1869, p. 72).

Conclusion

All statistical results, and then tables, Hayward constructed in consequence of his observations were published in the journal of the Society, with some arguments, immediately after the journey. These volumes were reports and meeting records of the Society. He managed to send all his notes and letters almost weekly (the process is not clear) to the Society via his servants. Some of the hand written papers are still kept in British Museum. Apart from the diaries of the journey kept as letters, their additional systematic publication demonstrated the positions, altitudes and even temperatures of every city and village visited. The passes between the Karakoram and Kunlun ranges and their geographical features, their

difficulty levels and even camps on their routes were presented to the public in detail. Furthermore, he also considered it appropriate to convey the details of the results of his journey by comparing them with the measurements calculated before him. This is important in terms of showing the accuracy of previous measurements or the technical reasons of critical errors as expected from him.

Primarily, he started with the comparison and the criticism of the observations of Schlagintweit and Johnson. These geographers suggested that the Karakoram and Kunlun ranges were the northern and southern sides of a single mountain range, however, Hayward refuted this and argued that they were two separate mountain chains as Alexander Von Humboldt did. Whether they were a continuation of the Himalayas or another mountain chain, the Karakoram range formed an obvious basin between the Indus River and the rivers of Central Asia and Eastern Turkestan. The Kunlun chain on the other hand formed a parallel chain that connected the Tibetan high plateaus with the north. This high plateau split into separate, detached peaks to the west and the sea level fell to the levels of Turkestan rivers. Another attractive discovery was the discovery of the source of the Yarkand and Karakash Rivers. The Yarkand River began at the north slope of the Karakoram and followed its course through two mountain ranges. As for the Karakash River, it began at the same range but further east and followed its course until it split the Kunlun chain.

He also stated and criticized the data the surveyors before him collected while reporting on the geographical position of Yarkand, Kashgar and Hotan (Yule, 1913, p. 311)³. According to Muhammad Hameed who made the geographical expeditions on behalf of Johnson, Yarkand was in latitude 38° 19' 46" north and in longitude 77° 30' east, which is really close to Hayward's measurement of in latitude 38° 21' 16" and in longitude 77° 28' east. According to him, the error in latitude was because the measurements were made in different locations. The measurements calculated at the north or south gates of the city may have caused this. The measurement on the position of Hotan was stated to be in latitude 39° 26' east by Johnson. However, if Yarkand was in longitude 77° 28' east, then Hotan had to be 1° 58' east of Yarkand. When it is taken into consideration that the route from Yarkand to Hotan via Karghalik and Guma was 175 miles, he determined that there was a margin of error regarding the longitude and the measurements were insufficient. He also asserted that the land between Sanju and Hotan must have been further east than Johnson observed, even though he did not visit Hotan. On his visit to Sanju-Arpalak Valley, he accepted the measurements of the longitudes that were nearby as truth. Considering that the distance between

³ These data are based on the book by Colonel H. Yule titled "Cathay, and The Way Thither Being a Collection of Medieval Notices of China, Council of the Hakluyt Society, vol.1, 1913" which also involves a map of Asia that compiled geographical studies conducted until then.

Sanju and Hotan was less than 60 miles, and evaluating the streambed of the Karakash River and the distance between Yarkand-Hotan and Sanju-Hotan, the geographical position of Hotan had to be between $79^{\circ} 55'$ and $80^{\circ} 5'$. However, it must be stated that Hayward, who had never been to Hotan, made his observations while criticizing Johnson, who made his observations while being there. The biggest problem, though, was to determine the geographical position of Kashgar.

Kashgar was never placed to the east of the 74^{th} meridian until Hayward's measurements, except that Montgomerie placed it to the 75^{th} meridian east. Although General Poltoratsky did not actually reach Kashgar or get close it, he placed it to the 76^{th} meridian. According to Hayward, Adolf Schlagintweit and his brothers Hermann and Robert could not be acknowledged as experts for they did not even reach any point within 191 miles of Yarkand and 317 miles of Kashgar. Their observations, as well as their locations on maps, were inaccurate. They did not just botch the Turkestan map, they also placed Sir-i-kul -that Wood, who was a good and sensitive surveyor-, discovered, $2^{\circ} 22'$, or some 135 miles, to the west of its true position. There is no direct proof other than their observations that combine Sir-i-kul's position, which was determined by Wood and is accurate, with Badakhshan. Yarkand, in longitude $77^{\circ} 28'$, and Sir-i-kul, in longitude $73^{\circ} 50'$, as given by Wood showed a difference of 200 miles between the two meridians. As Yarkand lied $41'$ north of the latitude of Sir-i-kul, the road distance was from 240 to 250 miles from Yarkand to Sir-i-kul via Tashkurgan and this proved the correctness of Wood's valuation. With reference to his own value of the position of Kashgar, it might be considered to be as fairly accurate as could be expected to be obtained, under circumstances attending an expedition into a country which has hitherto been so jealously closed to Europeans. What remained the great question to be determined in the geography of Central Asia, he noted, was, the exact configuration of the Pamir Steppe, and the identity of the main source of the River Oxus. Although so much of the configuration of the Pamir Steppe had been determined, it was known that it was of greater breadth than conjectured, and that none of the streams issuing from its lake-system drained through the range forming its eastern crest into the rivers of Eastern Turkestan. The Society's expectation of him would be to go on a second expedition to explore the unexplored parts of the Pamir Steppes. He would get financial support and be provided with equipment. However, this journey was left unfinished with his untimely murder before he could obtain the expected determinations and achievements.

One of the results he obtained, though, was that he was undoubtedly sure that the stream flowing westward from the Karakul was the source of the River Oxus. He deduced that making a Central Asia map based on the information given by the people in the region was impossible, due to hostility towards other races and

religion acting as a deadly drawback in the way of obtaining information. Thus, Hayward was certain that only developments in geography would fill this void. The people in Central Asia were the biggest problem in the way of geographers mounting expeditions there, however, these places would be known and recognized with civilization eventually. Central Asia presented the greatness of an unknown country and the history of it connecting with the past and the future to the explorers. Nevertheless, the comprehension of a noble passion needed to be taught to the explorers that could come here to internalize the mighty mountains and the wild life of the region by pushing all human needs to the background and self-sacrificing.

All of Hayward's papers and his map were published in the Society's journal. However, his journey was also subject to meetings before publication, where The President of the Society conveyed information about the journey, giving him an Order of Merit. This speech, in which the geography of Turkestan and the difficulties of the journey were once again conveyed, also included the dangerous aspect of the task which was performed successfully. It was mentioned that Hayward overcame the natural challenges of the region admirably, determined the latitudes and longitudes of the locations, which were unexplored and had never been visited by the British before, and approved and corrected some of them. The trust towards him was restored and the suspicions were cleared. It was believed that if he had survived, he would have ended his research with a detailed description of the mighty and wild Pamir Steppes through which flowed the Rivers Oxus and Jaxartes the sources of which Wood searched for, in 1839. Even if that could not materialize, Hayward had already claimed the right to earn the highest honor with his data and results.

One of the most important surveys of Hayward was finding a pass as crucial as the Yangi Pass but more suitable, and even easier than the Sanju Pass. This pass, which was scarcely used because of the attacks of Nagar robbers, would become a really practical trade route by the establishment of a fort. This matter was one of the moves that the British authorities were planning to realize. Baron Humboldt always maintained that there were two great chains running through this part of Asia, and that where they approached each other they were connected by a transverse chain. Hayward had fully established the truth of that view, and had also shown that the rivers rising to the west of the transverse chain flowed towards the Oxus, while all those rising to the east flowed towards the center of the Imperial China. That East Turkestan showed economical promise for the future was a common opinion to those who financed the journey. There was also the opinion that the Russians who were the biggest rivals of the British found the plans to trade in East Turkestan favorable regarding highly the geographical expeditions to Central Asia. According to this view, the Russians were also pleased because they could trade with this unified new power, after the Chinese

were completely expelled from East Turkestan. Political leaders such as Rawlinson guaranteed Yaqup Khan's reign, as long as he limited his influence to the territories independent from China lying between the Tian Shan and the territories of Britain or Tibet, vouching thus, that they would not have interfered with East Turkestan. This forced them to realize the importance of the journey and to cease activities. It was suggested that the journey laid the groundwork for improving trade in the region and reconnecting with the Russians. Questions regarding the Russians' action plan beyond Himalayas was answered in this period, when the commercial relations between Turkestan and India were suspended except small trade traffic sustained by the Kashmiris. Still prevalent was lack of information and communication. Hayward's expeditions showed that the Russians were still thousands of miles away from Kashmir and they had no intention of making any move forward. Another result was that the country from the Punjab frontier to the confines of East Turkestan was dependent upon the Maharaj of Kashmir, the ally of the British. The opportunities which the visit of Hayward to Yarkand gave of establishing commercial relations between India and Turkestan were not overlooked and they were particularly evaluated by Lord Mayo, who had directed the Governor of the Punjab to enter into arrangements with the Maharajah of Kashmir for surveying the routes and opening them to traffic. All these results, facilitated Hayward's new expedition to East Turkestan, and after his murder, the data he collected, were accepted to be a precursor of another journey under the leadership of Douglas Forsyth.

Bibliography

Primary Sources

- Hayward, G. W. (1868). Letter from Mr. G. S. W. Hayward, 15 August 1868. *Proceedings of the Royal Geographical Society of London*, 13(1), 9-10.
- Hayward, G. W. (1869). Journey from Leh to Yarkand and Kashgar, and Exploration of the Sources of the Yarkand River. *Proceedings of the Royal Geographical Society of London*, 14(1), 41-74.
- Markham, C. R. (1881). *The Fifth Year's Work of the Royal Geographical Society*. London: John Murray, Albemarle Street.
- Purdon, W. H. (1861). On the Trigonometrical Survey and Physical Configuration of the Valley of Kashmir. *The Journal of the Royal Geographical Society of London*, (31), pp. 14-30.
- Rawlinson, H. C. (1866a). Observations on Two Memoirs Recently Published by M. Veniukof on the Pamir Region and Bolor Country in Central Asia. *Proceedings of the Royal Geographical Society of London*, 10(4), 134-153.
- Rawlinson, H. C. (1866b). On the Recent Journey of Mr. W. H. Johnson from Leh, in Ladakh, to Ilchi in Chinese Turkistan. *Proceedings of the Royal Geographical Society of London*, 11(1), 6-15.

Wood, J. (1841). *Personal Narrative of a Journey to the Source of the River Oxus The Route of the Indus, Kabul, And Badakhshan, Performed Under the Sanction of the Supreme Government of India, in the years 1836, 1837, and 1838*. London: John Murray, Albemarle Street.

Secondary Sources

- Duthie, J. L. (1981). Pressure From within: The “Forward” Group in the India Office During Gladstone’s First Ministry. *Journal of Asian History*, 15(1), 36-72.
- Goldsmid, J. F. (1895). Obituary: Major-General Sir Henry Creswicke Rawlinson, Bart., G. C. B., etc. *The Geographical Journal*, 5(5), 490-497.
- Hannigan, T. (2011). *Murder in the Hindu Kush: George Hayward and the Great Game*. Tranquebar Press.
- MacKenzie, J. M. (1990). Introduction. *Imperialism and the Natural World*. Manchester: Manchester University Press.
- Roy, R. D. (1986). The Great Trigonometrical Survey of India in a Historical Perspective. *Indian Journal of History of Science*, 21(1), 22-32.
- Stafford, R. A. (1989). *Scientist of Empire: Sir Roderick Murchison, Scientific Exploration and Victorian Imperialism*. Cambridge: Cambridge University Press.
- Timmis, C. (1998). George Hayward: His Central Asian Explorations, His Murder, His Legacy. *Asian Affairs*, 29(2), 161-170.
- Waller, D. J. (2004). *The Pundits: British Exploration of Tibet and Central Asia*. Kentucky: The University Press of Kentucky.
- Watson, G. (2007). Siting in the Stage: Representations of Central Asian Environments in British Literature, 1830-1914. *New Zealand Journal of Asian Studies*, 9(1), 96-117.
- Withers, W. J. C. (2013). On Enlightenment’s Margins: Geography, Imperialism and Mapping in Central Asia, 1798-1838. *Journal of Historical Geography*, 39, 3-18.
- Yule, H. (1913). *Cathay And The Way Thither: Being a Collection of Medieval Notices of China*. Council of the Hakluyt Society.

